# **MODIS TECHNICAL TEAM MEETING**

# Building 33, Room E125 March 9, 2000

Vince Salomonson chaired the MODIS Technical Team Meeting. Present were Bill Barnes, Francesco Bordi, Wayne Esaias, Bruce Guenther, Dorothy Hall, David Herring, Michael Hohner, Chris Justice (via telecon), Steve Kempler, Michael King, Ed Masuoka, Harry Montgomery, Mike Roberto, Dan Tarpley (NOAA), and Eric Vermote, with Deborah Howard recording the minutes.

# 1.0 SCHEDULE OF EVENTS

EOS-IWG Tucson, AZ	April 11–13, 2000
CEOS WGISS/GOFC Meeting London, England	April 11–14, 2000
CEOS WGCV Moderate Resolution Land Products Validation Meeting Joint Research Centre, Ispra, Italy	May 22–25, 2000
AGU 2000 Spring Meeting Washington, DC	May 30–June 3, 2000
COSPAR 2000 Warsaw, Poland	July 16–23, 2000
COSPAR/IRS Joint Symposium Warsaw, Poland and St. Petersburg, Russia	July 21 and July 24, 2000
IGARSS 2000 Honolulu, HI	July 24–28, 2000
IRS-2000 St. Petersburg, Russia.	July 24–29, 2000
EOS/SPIE Symposium on Remote Sensing Barcelona, Spain	September 25–29, 2000
SPIE's Remote Sensing Japan 2000 Sendai, Japan	October 9–12, 2000
VENICE-2000 (Oceans from Space) Venice, Italy	October 9–13, 2000
PORSEC 2000 Goa, India	December 5–8, 2000

#### 2.0 MINUTES OF THE MEETING

## 2.1 Early Images

Vermote showed the group some sample early images of a 250m Land Surface Reflectance Product that reflects true color images. Blue and green were 500m, duplicated. Salomonson asked whether the Land group had a MODIS image concurrent with AVHRR and Vermote replied that they are looking for a clear day. Esaias said several coastal oceanographers have expressed interest in the higher resolution available with the first four bands.

Salomonson asked whether early images from the MODIS Disciplines were posted on the MODIS site (with password protection). Both the Atmosphere and Ocean Discipline groups have sent images to Hohner and Vermote said he would send him some Land images. Hohner is posting these images to the MODIS Web site in a password-protected archive. These images are not to be shared with the public until after the Terra press conference scheduled for April 19, 2000.

King announced that the Office of Public Affairs (PAO) would release the first status report, including some MODIS engineering images tomorrow (March 10). He said these images also would be published in the Earth Observer. Salomonson commented that the next milestone is the SWAMP meeting.

### 2.2 Instrument Report

Guenther said that MCST has a good SWIR configuration for channels 20-26 that he plans to recommend to the MODIS team. The downside may be that several channels may still not be operable. He recommends the Itwk/Vdet setting identified as 110/226 (see Attachment 1). Guenther said he would look for guidance from the science team later this spring on whether they would like the Itwk/Vdet setting changed at that time. By next week, MCST will provide a calibration product for converting to the correct readings for the SWIR bands.

For all data acquired by MODIS on March 18 and beyond, the look-up table (LUT) will process well. Data before March 18 would need to be reprocessed using a translation table to be provided by MCST next week. Guenther reports that nothing is wrong with the IR.

Salomonson stated that Direct Broadcast would be turned on at Day L+90 or March 16 (NOTE: At the SWAMP meeting NASA/HQ/Code Y took this under review—outcome TBD). King commented that software also should be made available. The Direct Broadcast group has agreed to hold images until after the Terra Press conference scheduled for April 19.

#### **2.3 GDAAC**

Kempler reported distributed computing environment (DCE) process problems at the DAAC over the past weekend (March 4–5). They began to catch up on

Tuesday and are about 3 days behind on producing Level 1A. Esaias asked how far behind the DAAC was on producing cloud mask and Kempler replied a few hours. Guenther said that MCST has been getting about 75% of the OBC's over the last week. Montgomery commented that his group does not have a complete set of SRCA data yet and Guenther said that MCST would send him that data.

## 2.4 MODIS Processing Priorities

Masuoka reported on MODIS L1 processing priorities at the GDAAC. He reviewed the current production scenario at the DAAC and one recommended by the PI working group (see Attachment 2). Esaias has been leading a discussion on this topic through the L1 and L2 working groups. Masuoka advised pulling the L1A out so that it would be archived. Other than that, there would be a day-to-day prioritization plan, including high priority validation and field sites. Esaias recommends that a MODIS contact person be available. He said this would be discussed at the MODIS Discipline Leads meeting next week. Masuoka reminded the group that we do not store the L0 data, we do store the L1A. He agreed that prioritization of fixed sites and sites of opportunity is needed.

Esaias stated that the L2 subsetter for CERES is not quite ready and the DAAC is not running it yet. Bordi said there was agreement at the L1 working group to run the other Level 1 PGE's and then run the L2 subsetter (it still needs debugging). The prioritization plan still needs some fine tuning. The L1 and L2 working groups, including Discipline, DAAC and MODAPS representatives will continue to refine the plan.

#### 2.5 MODAPS

Masuoka reported that there are still some EDOS holes in production (see Attachment 3). These holes are being filled in, MODAPS has not begun L3 dailies yet, and the Atmosphere group has asked for reprocessing of the L3's. Guenther advised focusing on Day 60 for good SWIR data. He said that the LUT's would be stable after March 18. King said the Atmosphere group was considering storing 1 full day of L1B data and they would pick a day after March 18. Vermote said the Land group has a similar plan. Salomonson said this would be a golden day. King agreed and said this would be a case that his group would keep in their archive.

Masuoka reported that inserts were continuing to be an issue for PGE's 09 and 10, with the multi granule checkout as the biggest issue. He said that all of the Land data was going into the production side on a hidden server. Guenther reminded the group that today is Science Day 15 (from the opening of the NAD).

Masuoka said that Al Fleig represented MODIS at the Mission planning review for Aqua. The short name for the ESDT's for Aqua will be MYDIS; the short name for MODIS is MODIS. Salomonson asked about processing capabilities for Aqua. Kempler said that a CCR has been submitted for two more processors at the DAAC for Aqua. Masuoka commented that we would not be able to meet production for Aqua unless MODIS funding for hardware was improved. Guenther said that there are some data processing and some ground operations

issues for Aqua. Masuoka stated that the bandwidth out of GSFC, the tape drives, and the archives are obsolete. Working on a migration to upgrades for the future would be useful.

Masuoka said that L1A and geolocation are ready and asked whether MODIS should release all of the L1 suite together or wait for the Terra press conference. Salomonson said that SeaWiFS has a series of Technical memos for users. He suggested that MODAPS develop a similar description of how to apply geolocation. Justice advised including correcting for the bowtie effect and other related issues. Masuoka said that we need to provide a L1A and L1B users guide.

#### **2.6 NOAA**

Dan Tarpley reported that MODIS data has flowed and is flowing via bent pipe to NOAA. He said that NOAA would like a formalized agreement with the MODIS team for assistance with software and agreed that NOAA would draft an agreement for MODIS review.

#### 2.7 MODLAND

Justice advised the MODIS Science Team to work together to prepare for the upcoming April Terra press release. Bordi noted that the Friday morning (March 17) session at the SWAMP meeting next week has been set aside to discuss preparations for the Terra press conference.

#### 2.8 Snow and Ice

Hall reported that her group had successful MAS, MODIS, and overflight coverage in New Hampshire on Monday, March 6 just before the snow began melting. Preliminary snow maps look good, however, the cloud mask is identifying too many clouds. The New Hampshire data is not in yet. Hall said that Anne Nolin stopped her scheduled field maneuvers because the snow melted.

### 2.9 Ocean Group

Esaias reported that the Oceans group is working with SeaWiFS Data Analysis System (SeaDAS) staff on ingesting data. He also reported that Miami is conducting QA analysis and comparing data to AVHRR. They are testing their QA and Validation process and it seems to be working well.

#### **2.10 MAST**

Hohner reported that the MODIS News page and Key Events Timeline has been updated through April. He said that Barbara Conboy is collecting names and IP addresses for access to early DAAC data. A MODIS Discipline Leads meeting is scheduled for next Wednesday, March 15.

Salomonson said that he would like the next MODIS Science Team meeting to be scheduled in May or early June. He asked that Conboy poll the Science Team to check on dates during that time. Major topics could include comparing progress and examining early MODIS images. Salomonson also would like an in-depth Terra early results meeting next September. It would be coordinated through the

Terra Project Science Office.

#### **2.11 Terra**

Herring reminded the group that the SWAMP meeting is scheduled for Thursday, March 16 and Friday, March 17 and Salomonson canceled the March 16, MODIS Technical Team meeting. Herring announced that the Natural History Museum is planning an interactive museum exhibit on Terra. They will have staff available at a room near the SWAMP meeting and would like to interview a MODIS representative. Salomonson volunteered to talk with them.

Herring said that Terra developers are available to assist MODIS team members in developing image concepts.

### 3.0 ACTION ITEMS

## 3.1 Action Items Carried Forward

1. Hohner, Fleig, and Masuoka: Include a space for MODIS early images on the MODIS home Web site. After launch, it would include downloadable early images on the MODIS site and a link to the DAAC's for obtaining products and data. The TRMM and SeaWiFS Web pages and how they process and present images can be used as good examples.

Status: This item remains open.

2. Masuoka: Submit an EOS-PM Data Product Update to ESDIS.

Status: This action item remains open.